R&D Center Set for P.G.

Pentagon Chooses Supercomputer Site

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The Defense Department said yesterday it will design and produce a new generation of supercomputers at a major new research center in Prince George's County.

The Supercomputer Research Center (SRC) is expected to attract a large number of advanced-technology firms to Prince George's County and become the hub of U.S. efforts to compete with the Japanese in building a so-called fifth-generation computer.

The $12 million facility will be located at the Maryland Science and Technology Center, near Routes 50 and 301 in Bowie. It will be built by the Institute for Defense Analysis (IDA), under contract with DOD through the National Security Agency, a defense intelligence agency that uses computer technology to intercept electronic communications and break codes. The IDA is a federally funded, nonprofit organization that conducts research on national security issues for DOD.

Research at the center is expected to have a profound impact on supercomputing technology as it applies to national security, higher education and industry, Defense Department officials said yesterday.

Research leading to development of supercomputers already is under way in the United States, but the Maryland center is the most ambitious undertaking yet in an effort to produce a new generation of ultra-high-speed computers. During the past decade, scientists and engineers have been attempting to overcome the limitations of existing computer technology by shrinking the computer chip. In theory, however, "we're reaching the limits of what we can do" with current computer technology, a Defense Department official said.

Research at the center will be aimed primarily at building a new generation of computers 10,000 times faster than the present generation, said Air Force Lt. Gen. Lincoln D. Faurer, director of NSA. The research is part of what appears to be a growing Defense Department effort to bolster its technology base in state-of-the-art computers.

A consortium of private companies has established a similar center in Austin, under the leadership of former NSA director Bobby Ray Inman. But officials said research conducted at the Maryland center will go beyond the work being done in Austin. The Maryland center will enable scientists and engineers to develop state-of-the-art technologies for computers "for the rest of the century," said Maryland Gov. Harry Hughes.

The center, which is being built as part of a collaborative effort by federal, state and local interests, initially will employ a professional research staff of at least 100 of the nation's top scientists and engineers.

Announcement of plans to build the supercomputer center was a coup for the state, which recently lost a major bid to land a multimillion-dollar Defense Department contract for a software research center at the University of Maryland's College Park campus. The Pentagon announced earlier this month that the center would be located at Carnegie-Mellon University in Pittsburgh.

NSA's decision to locate the supercomputer in Maryland is expected to enhance efforts by the state and the Washington area to compete with other high-technology centers. The SRC will provide the critical mass which is essential to creating a true high-technology research center, similar to facilities in California, Massachusetts and North Carolina," Hughes said.

Prince George's County Executive Parris Glendening said construction on the center will lead to development of 4 million to 5 million square feet of new office space in research parks expected to be built in the vicinity.

Hughes announced the plans to build the research center at a joint press conference in Annapolis with Gen. Faurer and IDA's president, retired U.S. Army general Andrew J. Goodpaster.

Goodpaster said the decision to build the research center in Maryland was based on several factors—including quality of life and proximity to the University of Maryland, which has an excellent computer science program.

The state solidified its position by donating nearly 20 acres of prime land at the Maryland Science and Technology Center, providing a $2 million grant for development and agreeing to help the center obtain financing with industrial revenue bonds. In addition, the University of Maryland, which established the science and technology center, will make available a wide range of resources, and will collaborate on research.

Faurer said that it is critical to national security that the United States maintain and increase its lead in high-speed computation processes. That is why NSA is establishing the supercomputing research center; NSA is already a major user of supercomputers.

DOD officials said the center will draw on all of the research and development being done through the Defense Advance Research Project Agency (DARPA) and elsewhere to develop information and products to be used to solve defense-related problems. DARPA hopes to make major breakthroughs in supercomputing by harnessing the center's research and applying it to defense. At the same time, however, the center's research will be used in industrial applications.

The center will attempt to develop so-called parallel computer processing systems. Parallel systems provide results much more quickly than standard computers, which process data sequentially.